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ABSTRACT

In 1990, a study was conducted of telecommunications in Washington State community colleges. The study focused on the quality of telecourses, current telecourse offerings, current and future plans for community college use of teleconferences, and innovations in telecommunications beyond telecourses. Data were gathered from four sources: administrative records in the state's student management information system; a survey of 1,185 students enrolled in video and telecourses at 11 of the 15 colleges offering telecourses in fall 1989; a survey of deans of instruction to determine the colleges' motives for offering or not offering telecourses; and a review of the literature on telecourses. Study findings, based on survey responses from 480 students and all of the deans of instruction, included the following: (1) 16 community colleges offered from 2 to 50 telecourses each year, enrolling a total of 366 full-time equivalent students in 1988-89; (2) 70% of the students took telecourses in preference to regular classes; (3) telecourse students were slightly older than other community college students, 64% were female, and the racial/ethnic background of the students responding was similar to that of the state population; (4) students gave high ratings to the quality of the telecourses, with 90% indicating that telecourses were an effective way to learn and that they would recommend telecourses to their friends; (5) 12 colleges were planning to initiate or expand telecourse offerings in the next 3 years; and (6) 15 colleges used national video-teleconference networks for faculty/staff in-service training, business training, and community groups. Appendixes include the two survey instruments and a 37-item bibliography. (JMC)

ED320640

Operations
Report
No. 90-1

Video Telecommunications in Washington Community Colleges

A Descriptive Study of the Current Activities and Future Plans

Study conducted and report prepared by
the State Board for Community College Education

June 1990

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The following colleges assisted with the study by conducting the survey of current telecommunications students: Bellevue, Columbia Basin, Edmonds, Grays Harbor, Lower Columbia, Seattle Central, Skagit Valley, South Puget Sound, Spokane Falls, and Walla Walla.

Deans of instruction and telecommunications coordinators at all colleges provided survey responses which were used in the study. The staff of the Telecommunications Center for Washington Community Colleges identified the telecourses examined in the study and provided technical information on the current telecommunications effort.

SBCCE staff members participating in the study were Amy Boatright, Deralyn Gjertson, Steve Hammer, Loretta Seppanen, and Bob Wark. Bill Blanchard served as consultant on the survey of literature.

OVERVIEW

Introduction

Telecommunications in Washington community colleges means the electronic transmission of video information between points. It generally takes the form of telecourses or teleconferences. Telecourses are courses offered via videotape, cable television, or public broadcasting stations. Teleconferencing is the audio or audio-video interconnection of meetings and seminars which link multiple sites through voice and/or voice and video transmission (one-way video, two-way video/two-way audio, data communications and two-way audio).

This study of telecommunications in Washington community colleges was conducted by the State Board for Community College Education (SBCCE). The SBCCE staff, with the assistance of a Video Telecommunications Research Review Group, designed the research to respond to both legislative concerns and the system's need for information.

Among the principal concerns addressed by the study were:

- Do community colleges serve time- and placebound students in their telecourses?
- Are telecourses perceived to be of equally high quality as campus-based courses?
- To what extent are colleges offering teleconferences and telecourses?
- What plans have colleges made for the future use of telecommunications?

The study answers questions about the quality of telecourses, describes and evaluates current telecourse offerings, outlines the current and future plans for community college use of teleconferences, and suggests innovations in telecommunications beyond telecourses.

Summary of Findings

- Telecourses provide quality education to more than 3,000 students each year. Sixteen community colleges currently offer from 2 to 50 telecourses a year. A total of 366 annual full-time equivalents (FTEs) were generated by telecourses in 1988-89.
- Most telecourse students (70 percent) are time- and placebound students (see Page 10 for definition); the rest enroll in telecourses because the campus-based course they wanted was filled when they enrolled. Telecourse students were slightly older (median age 30) than other community college students. Two-thirds of the students surveyed were female. The race/ethnic background of the students responding was similar to that of the state population.
- Students gave high ratings to the quality of telecourses. Nine out of ten students said the telecourse was an effective way to learn and that they would recommend telecourses to their friends. The positive ratings are consistent with research done elsewhere which shows that telecourses are of the same quality as campus-based courses and higher in quality than other distance-learning options available to time- and placebound students.
- Telecourse offerings are likely to increase in the future. Twelve colleges plan to initiate or expand telecourse offerings in the next three years. Five other colleges are uncertain about offering such courses. Only one college has definite plans not to offer telecourses.
- Today telecommunications in Washington community colleges means more than telecourses. This year, 15 colleges used national video-teleconference networks for faculty/staff in-service training, for business training, and for community groups.
- Teleconferences and other innovations in telecommunications will increase in the future if provided adequate funding and technical support. All but five colleges currently conduct or plan to conduct teleconferences.
- Most colleges see a need for a state role related to telecommunications. Colleges said they were seeking ways to reduce the high cost of equipment, transmission facilities, and training with joint planning and purchases.
- Each college's experience with telecommunications has been unique. Some have had overwhelming success with telecourses but have not used teleconferences. Others find success with both telecourses and teleconferences. In earlier years, others had poor student and faculty response to telecourses and use only teleconferences or have little experience with telecommunications.

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Context of the Study

Problem Statement

All Washington's community colleges have had some experience with telecommunications. In past years, several colleges have had poor student or faculty response to telecourses. Others have had more interest than they can serve. Some have used teleconferences extensively while others have never participated in a teleconference. Because the experiences of each college have been different, no system consensus has evolved about the status or future role of telecommunications.

In the past, this lack of consensus was not problematic; only those colleges using telecommunications paid for the resources. Today, however, telecommunications funding is a system issue. Support of telecommunications is a cost to all colleges whether or not they use teleconferences or offer telecourses. Furthermore, all colleges have a stake if the community college system joins with the other higher education groups to make a request for additional funding for telecommunications in the 1991 legislature.

As community colleges plan expansion of their telecourse efforts, particularly in light of the legislative concerns about this method of educational delivery, the following questions will need to be answered:

- Do telecourses provide quality instruction for time- and placebound students?
- What are college plans for the future expansion of teleconferences and telecourses?

Given the answers to these questions, the community college system is in a better position to make decisions about future funding for the telecommunications effort.

The SBCCE with the assistance of the Video Telecommunications Research Review Group designed this study to provide the basic information needed to answer the research questions. The study provides basic information for responding to system and legislative inquiries about the current status of telecommunications.

History of Telecommunications in the Community College System

Telecommunications efforts began in the community colleges with the offering of telecourses. Prior to 1977 several colleges on both sides of the state voluntarily cooperated to offer courses aired on public television. In 1977 a consortium of about a dozen institutions offering courses on public television formed under the auspices of the Washington Community College Instructional Commission. Most were in the Puget Sound region but Centralia, Grays Harbor, Yakima, and Spokane also coordinated their efforts with the consortium. Members were assessed a fee used to provide courses at a considerably reduced rate and to support a half-time staff person.

When the community college system struggled with budget cuts in the early 1980s, maintaining funding for the consortium became increasingly difficult. Outside funding appeared necessary to save the telecommunications effort from demise. Consequently, Bellevue Community College received an Annenberg grant on behalf of the consortium. When the grant was funded in 1985, Bellevue became the administrative center for the staff of what was then called the Puget Sound Telecommunications Center. The Center provided technical and logistics support for the colleges using telecommunications in instruction. The grant funds supplemented the Center budget which was also funded by fees paid by participating colleges.

The Annenberg grant ended in 1988 and the community college system took over funding of the telecommunications effort. Funding is now provided by an allocation from the community college legislative appropriation prior to the distribution of the appropriated funds to the individual colleges. That means that the system telecommunications effort reduces the funds available for distribution to all colleges.

The community college telecommunications effort is coordinated by the Telecommunications Center for the Washington Community Colleges.

Telecommunications Center for Washington Community Colleges

The Telecommunications Center, which is housed at Bellevue Community College, operates on a $161,210 annual budget. The funds pay for a state-wide lease of approximately 30 courses a year and telecast fees of $30,000. The centralized purchase of rights to use telecourses results in a significant savings over the cost of each college individually obtaining rights to the telecourses. The Bellevue-based staff handles the planning, reporting, and communications requirements of this effort. The staff also negotiates fees and coordinates teleconferencing activities between colleges and teleconference networks.

Table I on the next page shows the use by each college of the Telecommunications Center as reported in Fall 1989. All colleges but one (Big Bend Community College) use the services of the Telecommunications Center. Five colleges make extensive use of Center services.

In addition to the services listed in Table I (on the next page), colleges said that the Telecommunications Center assisted them by negotiating contracts for telecourse rights, providing faculty in-service training, and by acting as a liaison with the legislature on funding issues.

Telecommunications Issues

As the state's telecommunications effort has expanded, the community college staff and legislators have raised issues related to planning, the type of students served, funding, and scope of the telecommunications effort.

Issue 1: State Planning and the Legislative Role

In 1988-89 state agencies with an interest in state-wide telecommunications efforts prepared a plan to create a state-wide interactive, one-way video and two-way audio telecommunications system via satellite. That plan was jointly prepared by the Office of the Superintendent of Public Instruction; the Higher Education Coordinating Board (representing the community colleges and the University of Washington, Washington State University, and Eastern Washington University); and state government, specifically the Department of Community Development and the Department of Information Services.

Table I
USES OF TELECOMMUNICATIONS CENTER FOR WASHINGTON COMMUNITY COLLEGES

	Related to Telecourses				Other			
	Telecourse Description for Review	Tape Dubbing	Recording from Satellite	Other Support	Recording Teleconferences	Access to Teleconferences	Telecommunications Consulting	Other
Peninsula	X	X		X				
Grays Harbor	X			X			X	
Olympic		X					X	
Skagit	X	X	X	X	X	X	X	
Everett							X	
Seattle Central	X	X		X			X	
Seattle North	X				X	X	X	X
Seattle South						X		
Shoreline		X					X	
Bellevue	X	X	X	X	X	X	X	X
Highline	X	X		X			X	
Green River	X							
Pierce	X	X		X				
Centralia	X	X	X	X	X	X	X	X
Lower Columbia		X					X	X
Clark		X	X				X	
Wenatchee Valley						X		
Yakima Valley	X			X			X	
Spokane Falls	X	X						
Big Bend	does not use							
Columbia Basin	X		X	X			X	
Walla Walla	X	X		X		X		
Whatcom	X						X	
Tacoma	X	X	X	X	X	X	X	X
Edmonds	X	X		X	X	X	X	
South Puget Sound						X	X	
TOTAL	17	15	6	13	6	10	18	5

While each agency's goals for telecommunications were unique, participants found they could meet their needs with shared technology. The plan was published in January 1989 as the "Proposal for Sharing Video Telecommunications Resources." It is often referred to as "the Triad Plan."

The community college part of the plan "proposed to connect the twenty-seven campuses by satellite, using the system to broadcast both academic programming and teacher in-service programming to those campuses and to cable systems for broader dissemination into homes and businesses." The plan proposed three sites for origination of televised programs: Bellevue Community College, Clark College and Spokane Falls Community College.

The Triad plan became part of a 1989 legislative funding debate. It was revisited by the 1990 legislature.

Issue 2: Defining the Students Served

During the debate, legislators asked about the kind of students already served by telecourses and the quality of such courses.

The general literature about telecommunications and the need to provide service to placebound adults have led some to assume that telecourses are meaningful only in rural parts of our state. Washington community college telecourses are designed to provide quality access for both time- and placebound students in both urban and rural areas.

"Placebound students" are generally understood to be those who live a considerable distance from an institution of higher education and who are not in a position to leave home to attend college, due to work or family obligations.

Examples of timebound students include those whose only other option would be correspondence courses or those who could enroll in standard on-campus classes which they would routinely miss. Such stu-

In this study placebound students were identified in two ways:

- **Those who said that one reason they took telecourses was that distance to the college was too far, and/or**
- **Those who lived in zip codes beyond the city area of the main campus of the college.**

In this study, timebound students were identified as:

- **Those who said that one of the reasons they took telecourses was conflicts with scheduled classes due to family commitments or work schedules, and/or**
- **Those who took telecourses to minimize travel to and from campus.**

dents include: rotating shift workers, parents without access to childcare, and adults caring for parents or handicapped children.

Issue 3: System Funding

Another telecommunications issue is uncertainty within the community college system about the priority it should give to telecommunications funding. The Triad Plan has a three-year, $11.5 million price tag to provide an infrastructure to serve higher education, public schools, and state government. Legislatively, that request will compete with other community college requests for additional funding. Competition with other established community college needs is part of the reason for the community college system's uncertainty.

Issue 4: Scope

Many see telecommunications and telecourses as synonymous, since the history of their telecommunications effort has been primarily focused on course delivery.

Many colleges, however, have expanded efforts beyond telecourses. Fifteen colleges have expanded efforts to include teleconferences. In 1989-90, the Telecommunications Center purchased annual rights to receive programming from two national networks. The networks provide programs for teleconferences that can be used by all colleges with capabilities to receive satellite transmissions (downlinks).

The Deans' Executive Committee for Telecommunications set the following additional priorities for telecommunications which could support all colleges:

- Staff and faculty in-service training
- Continuing education for business and industry (instruction at the work-site)
- Course sharing between colleges (increased offerings without additional specialized faculty)
- Teleconferences (video seminars, reduced travel)
- Public schools/community college cooperation (sharing telecommunications facilities)

The deans of instruction have also recommended these new directions as important priorities.

Until the system expands the telecommunications discussion beyond telecourses, it will have difficulty debating the funding merits of the effort.

Study Design And Methods

SBCCE gathered data for this study from four sources:

1. **Administrative Records:** SBCCE used administrative records in the SBCCE Student Management Information System (SMIS), which is the official record of courses and students enrolled in the system, to describe the telecourse students and courses in 1988-89. Those files describe the age, sex, race, status (new or continuing student) of students and the number of courses, number of full-time equivalent (FTE) students and number of full-time equivalent faculty (FTEF) in courses.

2. **Telecourse Student Survey:** SBCCE conducted a Fall 1989 Video and Telecourse Student Survey at eleven of the fifteen colleges offering telecourses that fall.

TELECOURSE STUDENT SURVEY RESPONSE

SBCCE obtained four hundred and eighty usable responses from the 1,185 students enrolled at the eleven colleges. The overall response rate was 40.5 percent, but at five colleges the response rates reached 60 to 90 percent. There were no meaningful statistical differences between the colleges which had a high response rate and those with low response rates; thus, the results are assumed to be highly representative of all student enrolled in telecourses in Fall 1989.

The only notable differences between respondents from colleges with significantly different response rates were:

- **Low response rate students were slightly more likely to believe that telecourses were harder than other courses,**
- **Low response rate students were slightly more likely to disagree with the statement that telecourses were less difficult than others, and**
- **Low response rate students were slightly more likely to be employed full-time and less likely to be full-time homemakers.**

In all other regards the responses of students at low response rate colleges were the same as those at high response rate colleges.

For response rate information by college see Appendix A.

Colleges or SBCCE staff distributed the survey to currently enrolled telecourse students in late October and early November of 1989.

3. **Telecourse Offering Survey:** SBCCE sent a Video/Telecourse Offering Survey to Deans of Instruction to determine the college motives for offering or not offering telecourses. SBCCE sent the survey in November 1989. All campuses participated in the survey except Spokane Community College where telecourses are coordinated through the Spokane Falls campus.

4. **Literature Review:** SBCCE conducted a review of the literature on the quality of telecourses compared to other methods of course delivery. The review used a computer-assisted search of the Educational Resource Information Center (ERIC) and Dissertation Abstracts International bibliographic data bases.

I — Findings: Beyond Telecourses - Additional Telecommunications Efforts

Teleconference Use in Washington

Teleconferences are a relatively new innovation in telecommunications. The Community College Satellite Network (CCSN), sponsored by AACJC, for example, only began broadcasting in early 1989. Yet 15 colleges already use this new technology as shown in Table II.

TABLE II
Use of Teleconferences, 1989-90

(Multiple Responses Allowed)	Colleges (N=26)
Not Using	11
Using for Faculty/Staff Development	12
Using for Business Training	9
Other Uses	1
No Response	1

South Seattle Community College (SSCC) illustrates the use of teleconferences over several years. For the past five years SSCC has used its satellite dish to receive about 16 teleconferences a year. The college hosts the conferences for business groups such as electrical contractors and medical organizations. They tie into national conferences via two-way audio and one-way video transmission. The college helps the group plan a program which will assure effective participation and provides the appropriate facilities to host a meeting.

The satellite downlink at SSCC is also used to receive programs from the National Campus Network (4-6 hours per day of student activities programming) and special programs such as shows from the Spanish International Network.

In fall 1989, all but five colleges said they planned to offer teleconferences in the future.

Special Projects

Colleges spend their own resources to purchase time on cable television and offer telecourses purchased or rented from sources other than the Telecommunications Center in Bellevue. For example, Spokane Falls Community College (SFCC) utilizes a channel on its local cable system to provide programming 24 hours a day. In addition, it buys five hours per week on KSPS, the local educational television station, to broadcast to the entire district.

SFCC also has plans to develop an Instructional Television Fixed Service (ITFs) which allows students to receive courses transmitted via microwave using a small decoder with their own television sets. Telephones provide the two-way audio communications. ITFs is seen as an excellent method for reaching small businesses.

Wenatchee Valley College houses the area's local access cable station. They have used the station to offer telecourses, to air Eastern Washington University telecourses, and to serve the community. Broadcasts on their system are limited to the area near Wenatchee. The campus has been unable to extend telecommunications service to its Omak campus. The college plans to expand its telecommunications efforts into an electronic mail system for the 27 public school districts this year.

II — Findings: A Profile of Washington Community College Telecourses

The SBCCE developed descriptive information from an analysis of administrative records of the telecourses offered by Washington community colleges in 1988-89 and from surveys of students and administrators in fall 1989.

What Is the Nature of Telecourses in Washington Community Colleges?

Who Delivers What?

All but two colleges, Big Bend and Everett, have formerly offered or currently offer telecourses. South Seattle is the only college with definite plans not to offer such courses in the future.

Colleges use all three funding sources—state appropriations, contracts, and student funds—for telecourses, though the majority of courses are state-funded, as shown in Table III.

Even though most students use video cassette as their

TABLE III
Telecourse FTEs by Funding Source
Annual FTEs 1988-89

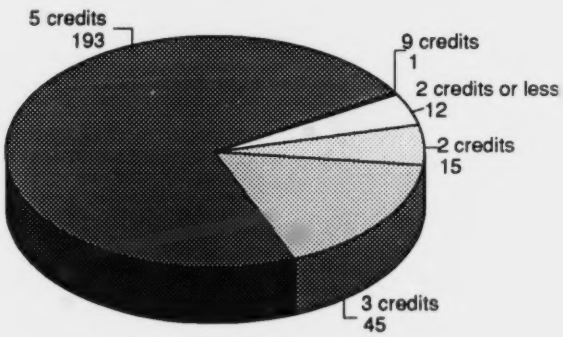
	State-Funded	Contract-Funded	Student-Funded	Total FTEs
Grays Harbor	4.8			4.8
Skagit Valley	29.4	6.8		36.2
Seattle Central	13.4	9.8		23.1
Bellevue		33.9	>0.1	33.9
Highline			3.8	3.8
Pierce	31.2			31.2
Centralia	2.3	8.6		10.9
Lower Columbia	13.8			13.8
Clark	23.1			23.1
Yakima Valley	24.9			24.9
Spokane	29.1			29.1
Spokane Falls	80.0	8.8	0.4	89.1
Columbia Basin	26.2			26.2
Walla Walla	1.5			1.5
Tacoma	2.8	2.6		5.4
So. Puget Sound	9.4			9.4
SYSTEM TOTALS	**291.8**	**70.4**	**4.2**	**366.4**

main method of viewing telecourses, most colleges offer telecourses via three media: broadcast television, cable television and video tape. At eight colleges the students view their video tapes at home. At three colleges, most view the tapes on campus. At two colleges the main viewing method is broadcast television viewed at home; at three colleges it is cable.

How Much Credit is Awarded?

Most telecourses are offered for five credits, but the average credit value of the courses is 4.3 (See Figure 1).

Figure 1
Credit Value of Telecourses
(266 Courses)



What Subjects are Offered?

Most (85 percent of the annual FTE) telecourses are academic in nature as seen in Table IV.

TABLE IV
Type of Telecourses Offered

	Number of Courses	FTE	% of Telecourse FTE
Academic	199	311	85%
Vocational	34	38	10%
Basic Skills	33	17	5%
Total	**266**	**366**	

The telecourses most commonly taken by students were General Psychology, offered at 12 colleges, and English Composition, offered at ten colleges.

In 1988-89 there were 4,025 enrollments in telecourses by 3,178 students. Some 1,500 students enrolled in two or more telecourses during the year.

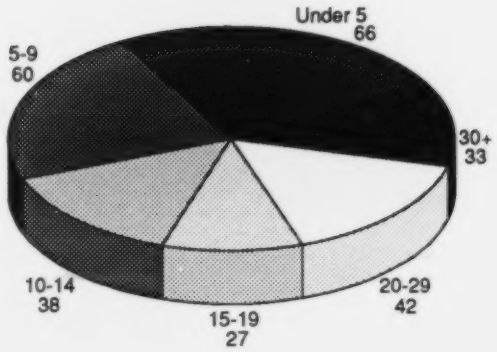
How Many Students Per Course?

There is no typical class size for telecourses. Eight colleges offered telecourses to small numbers of students (fewer than five). On the other hand, Spokane Falls Community College offered an astronomy telecourse to 140 students. The median class size was ten, but size varied greatly as seen in Figure 2 on the next page.

Who Teaches Telecourses?

More than half the 16.4 full-time equivalent faculty (FTEF) teaching telecourses were on full-time contracts. The part-time/full-time mix of faculty teaching telecourses was similar to that of other courses. Fifty-five percent were teachers on full-time contracts (16.5 percent on regular contracts, 38.6 percent on moonlight contracts), 29 percent were part-time, and 16 percent were volunteer or contracted faculty.

Figure 2
Telecourse Class Size
(266 Courses)



Despite small class sizes, the student faculty ratios in telecourses were similar to the ratios in other academic courses (the ratio for state-supported telecourses was 24.1; for all state-supported courses it was 24.7) (Table V).

TABLE V
Student/Faculty Ratios in Telecourses
Academic Year 1988-89

	State-Funded	Contract-Funded	Student-Funded	All Funds
Grays Harbor	29.9			29.9
Skagit Valley	27.1	6.4		16.9
Seattle Central	40.1	20.7		28.7
Bellevue		27.9	19.0	27.8
Highline			16.3	16.3
Pierce	20.3			20.3
Centralia	22.6	42.1		35.5
Lower Columbia	23.7			23.7
Clark	24.7			24.7
Yakima Valley	32.9			32.9
Spokane	32.5			32.5
Spokane Falls	21.8	9.4	19.3	19.3
Columbia Basin	32.3			32.3
Walla Walla	6.5			6.5
Tacoma	9.7	23.2		13.4
So. Puget Sound	12.4			12.4
SYSTEM TOTALS	**24.1**	**17.6**	**16.6**	**22.2**
% Of Total				

What do Telecourses Cost to Offer?

Two-thirds of the colleges offering telecourses said such courses cost the college about the same to offer as regular classes. Two colleges said the costs were less, one said more; and two said the cost varied greatly by course. Telecourses cost the student the same amount as any other course offered for the same credit value.

Why are Telecourses Offered?

Colleges said they scheduled telecourses primarily to offer high quality courses to students whose needs cannot be met in regular classes given current resources (Table VI).

TABLE VI
Reasons for Offering Telecourses

(Multiple Responses Allowed)	No. of Colleges (N = 15)
Reach students who cannot attend regular classes because of work or family constraints	13
Offer greater flexibility for students planning a full course of study	13
Offer high quality instructional courses	12
Offer an individualized learning option	10
Reach students who cannot attend regular classes because of their distance to campus	10
One more way to serve the demand given limited funding	8

One college said it also offered telecourses to provide closed-captioned instruction for the hearing-impaired. Another said telecourses provide service to students without the need for more classrooms.

Why Do Some Colleges Not Offer Telecourses?

Colleges that were not offering telecourses did so primarily because of previous experiences with low student demand and lack of faculty interest as shown in Table VII.

TABLE VII
Reasons for Not Offering Telecourses

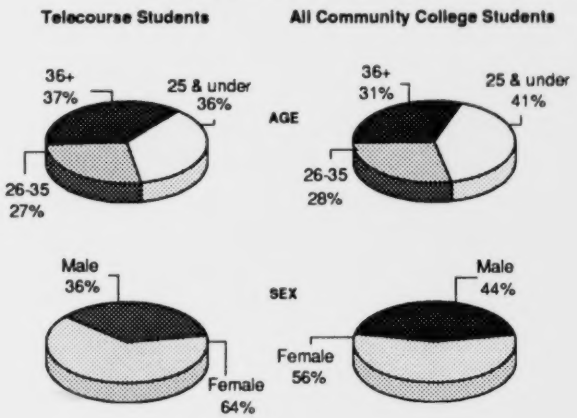
(Multiple Responses Allowed)	No. of Colleges (N=11)
Lack of faculty interest	8
Tried telecourses, but demand was low	7
Already offered by neighboring colleges	4
Too costly to offer	4
Concern for quality of instruction using telecourses	4
No means of reaching the population we want to serve	3
Enrollment lids	2

What Are Telecourse Students Like?

The median age of telecourses students was 30 compared to a median age of 28 for all students. There were more telecourse students 36 years of age and older than in traditional courses as shown in Figure 3.

Women outnumbered men in telecourses, with 64 percent female. By comparison, 56 percent of all students in community colleges are female.

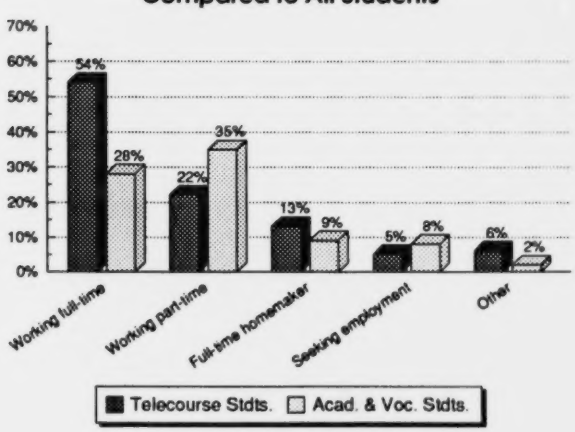
Figure 3
Demographics of Telecourse Students Compared to All Students



The 3,178 students enrolled in telecourses in 1988-89 were typically older students, busy with work and family and enrolled to prepare to transfer.

Telecourse students closely mirrored the racial diversity of the state with 89 percent white, 2.9 percent Asian, 2.3 percent Black, 2.2 percent Hispanic, 1.6 percent Native American and 1.9 percent other.

Figure 4
Work Status of Telecourse Students Compared to All Students



Telecourse students were much more likely to be working full-time than the typical community college student. The majority of telecourse students were working full-time as shown in Figure 4. (Data for all students was obtained from the Current Student Survey, Winter 1988.)

Telecourse students were slightly more likely than the typical student to be caring for children as well as attending college. Four

out of ten telecourse students had dependent children in their care, as shown in Figure 5.

The typical telecourse student had already started his or her postsecondary education before enrolling in the telecourse. In fall 1988, 15 percent of the telecourse students were new to college. The rest had completed some college, but few (only five percent) had completed a bachelor's degree as shown in Figure 6.

While most (78 percent) telecourse students in fall 1989 were enrolled in their first telecourse, about 22 percent had already completed at least one other telecourse, and one percent had completed five or more telecourses.

Figure 5
Family Status of Telecourse Students Compared to All Students

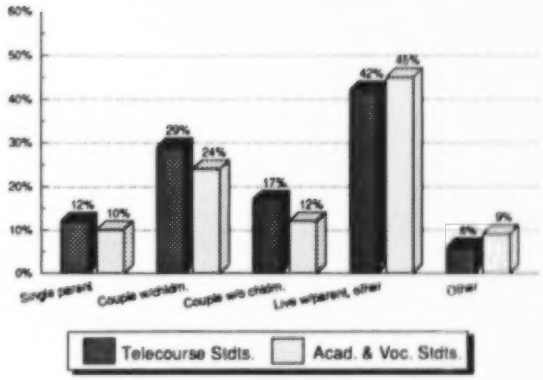
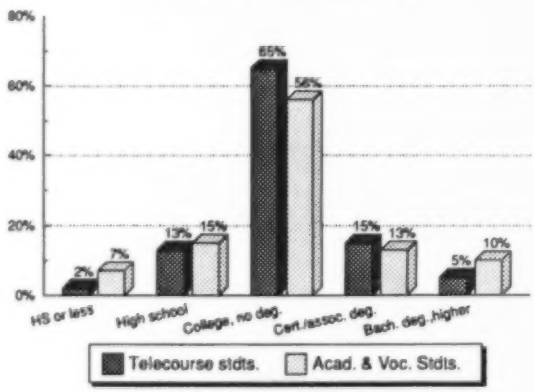


Figure 6
Education Level of Telecourse Students Compared to All Students



How Much Time Do Students Devote to Telecourses?

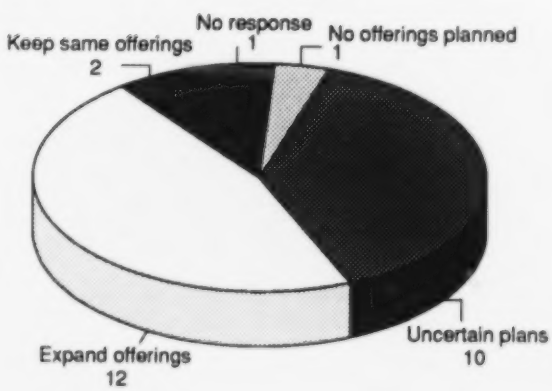
Students said they spent an average of two hours each week viewing the lessons for each course. (Viewing time ranged from 20 minutes to eight hours per week.) Additionally, students spent six hours per week reading and studying for their courses (30 minutes to 33 hours). Thus, the typical telecourses student spent eight hours per week per course viewing or studying the course material.

Most (80 percent) telecourse students took only one telecourse during the academic year, but 16 percent took two courses, and four percent took three or more courses. One student enrolled for six telecourses during the year.

What Are College Plans for the Future?

Growth in telecourses is projected at 12 colleges as shown in Figure 7.

Figure 7
Telecourse Plans for Next Three Years
(26 Colleges)



Why Do Students Enroll in Telecourses?

Course-Conflict Students

Thirty percent of students enrolled in telecourses in fall 1989 preferred regular courses but found all sections they could attend were full. These students will be called the "course-conflict" students in this analysis. These students typically viewed the quality of telecourses less positively than other telecourse students.

The number of course-conflict students varied significantly by college. At Spokane Falls and Grays Harbor only 20 percent of telecourse students said they preferred regular courses but found them filled. Over 40 percent of telecourse students fit the course-conflict category at Bellevue, Walla Walla, and Edmonds community colleges.

Course-conflict students were more like the typical community college student than other telecourse students in terms of age, sex and family status. Half the course-conflict students were under 26 years of age compared to only a third of other telecourse students. As younger students they were much less likely to be parents (25 percent were parents compared to 48 percent for other telecourse students) and more likely to have no prior college experience (21 percent compared to 12 percent for other students). More course-conflict students were male, though the majority (66 percent) were female. That compares to 76 percent female for other telecourse students.

Time- and Placebound Students

Most students (70 percent) took telecourses in preference to regular classes. These students are called "time- and placebound students" because their main reason for enrolling in telecourses related to not having the flexibility to enroll in regularly-scheduled courses.

The majority of time- and placebound students said they took telecourses to minimize their travel time to campus and to handle conflicts with work and family schedules as shown in Table VIII on the next page.

TABLE VIII
Reasons Time- and Placebound Students Take Telecourses

(Multiple Responses Allowed)	% of Students (N=294)
Minimize Travel to Campus	73%
Work Schedule Prevents Attending Scheduled Classes	63%
Family Commitment Conflicts With Scheduled Classes	55%
Prefer Learning Via Telecourses	40%
Distance to Campus Too Far	18%

For students in the 25 to 35 age group, family commitment was the reason 67 percent of them took telecourses. About half the students with work schedule conflicts said they worked a typical full-time or part-time daytime job. Many of them said family commitments in the evening keep them from taking regular courses. The other half had a variety of work situations that interfered with taking regular classes:

- On-call work
- Flexible schedules, always changing
- Work in another town a considerable distance from home
- Long hours for short periods
- Unscheduled overtime
- Two jobs
- On call or away for military service part of the month

Most students in telecourses are not placebound in the sense that they live far from the campus. The majority (58 percent) of telecourse students resided in the same zip code area as their college, but that pattern varied considerably by college, as shown in Table XIV. Some colleges are constrained to serve only those in nearby areas due to the lack of a means of transmitting telecourses at a distance.

TABLE XIV
Distance to Campus for Telecourse Students 1988-89

	% of Students	
	Near N=1,843	Far N-1,335
Grays Harbor	63%	37%
Skagit Valley	34%	66%
Seattle Central	32%	68%
Bellevue	31%	69%
Highline	30%	70%
Pierce	24%	76%
Centralia	62%	38%
Lower Columbia	72%	28%
Clark	76%	24%
Spokane	77%	23%
Spokane Falls	71%	29%
Columbia Basin	94%	6%
Walla Walla	94%	6%
Tacoma	69%	31%
South Puget Sound	84%	16%
All Telecourse Students	58%	42%

Near=Same zip code as college campus immediate community.
Far=Zip codes beyond the immediate community.

Figure 8
Role of Telecourses for Time- and Placebound Students
(294 Survey Respondents)

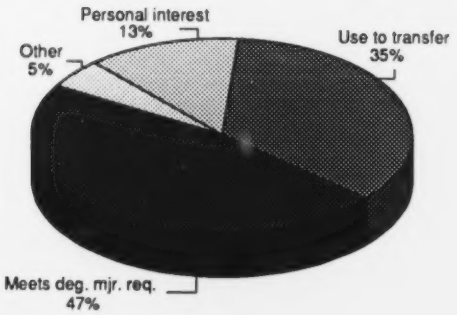


Figure 9
Educational Objective of Time- and Placebound Students
(294 Survey Respondents)

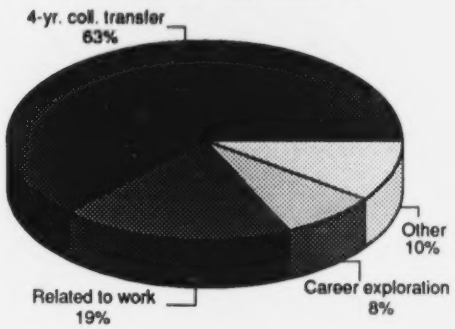
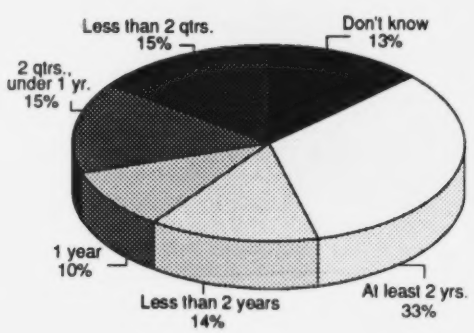


Figure 10
Quarters and Years Time- and Placebound Students Plan to Attend
(294 Survey Respondents)



Time- and placebound students were older, more likely to be female and more likely to care for dependent children than course-conflict telecourse students. Three-quarters were women and nearly half (48 percent) had children to care for as well as college and work. A third were 36 years of age or over and another third were between 26 and 35. Fifty-six percent worked full-time.

Time- and placebound students said their telecourse primarily served to meet requirements for their major or were viewed as a transfer course (see Figure 8).

The goal of most time- and placebound telecourse students was preparation for transfer, as shown in Figure 9.

Consistent with their transfer plans and the fact that most had already completed some college, most telecourse students planned to stay at their college for less than two years as shown in Figure 10.

Do Telecourses Provide Quality Instruction?

Washington Community Colleges

Currently-enrolled telecourse students were asked a variety of questions about the quality of telecourses. Their responses to all questions show evidence that students perceive telecourses to be of equal quality with other courses.

Nine out of ten telecourse students enrolled in fall 1989 rated the academic rigor (difficulty of papers, readings, lectures, tests and other assignments) as the same (62 percent) or harder (27 percent) than other courses. About 11 percent said telecourses were easier.

Telecourse students generally agreed with the statements that telecourses are an effective means to learn course content and that they would recommend the courses to a friend.

Telecourse students also disagreed with statements that telecourses were frustrating because they were hard to understand and that telecourses were uninteresting. While these evaluations of telecourses are very positive, they do not imply that telecourses are superior to regular courses. The majority of telecourse students disagreed with the statement that telecourses are more valuable than other courses.

Table IX shows that time- and placebound students responded differently to the statements on telecourse quality than did the course-conflict students.

TABLE IX
Student Opinion of Telecourse Quality

	Percent of Students		
	Time- & Placebound (N=302)	Course-Conflict (N=130)	All Respondents (N=480)
Effective way to learn			
Agree	87%	67%	82%
Disagree	4%	14%	6%
Not Sure	9%	20%	12%
Recommend to a friend			
Agree	85%	58%	78%
Disagree	4%	20%	9%
Not Sure	11%	22%	13%
Frustrating because I don't understand			
Agree	6%	19%	10%
Disagree	87%	69%	81%
Not Sure	7%	13%	9%
Courses are uninteresting			
Agree	13%	33%	18%
Disagree	78%	55%	71%
Not Sure	9%	12%	11%
More valuable than other courses			
Agree	18%	8%	15%
Disagree	47%	64%	52%
Not Sure	35%	28%	33%

Note: Forty-eight respondents were not classified as either Course-conflict or Time- or Placebound.

Maintaining quality in telecourses requires attention to giving students help with their studies. The majority of telecourse students (64 percent) said they were able to get the help they needed. Only nine percent said they did not get all the help needed and the rest were uncertain.

Colleges provide help to students via structured contact between the teacher and students. On average, instructors offer one contact per week with the telecourse students. Instructors also give feedback in the form of tests, graded papers and conferences about two or three times per quarter. Table X shows the number of colleges which provide contact and feedback at various intervals.

TABLE X
Average Number of Teacher Contacts and Evaluations of Progress (Feedback)

	Number of Colleges (N = 15)	
Intervals Help Provided	**Contact**	**Feedback**
Two or three times a quarter	-	5
Four to eight times a quarter	7	3
Once a week	5	2
More than once a week	2	-
Varies by course	1	5

Most colleges (9 of 15) used all of the methods of student-teacher interaction typical for telecourses. The number of colleges using each method is shown in Table XI.

TABLE XI
Methods of Student-Teacher Contact

(Multiple Responses Allowed)	No. of Colleges (N = 15)
Initial class meeting	15
Test session with teacher present	14
Phone hours available for teacher	13
Mail contact	13
Study sessions with teacher	10

National Studies

Studies conducted in other states have also found that telecourses are judged to be as effective as regular courses. The SBCCE conducted a review of the research on the quality of telecourses conducted between 1986 and 1989. Other researchers have based their findings on course grades or pre-test/post-test measurements of learning (e.g., Stover, 1986; Wergin, Boland, and Hass, 1986; Adams, 1987; Flagg, 1987), student opinion (e.g., Platten and Barker, 1987; Livieratos, 1988; Research Communications, Ltd., 1988; Relaford, 1988) and faculty opinion (e.g., Oaks, 1986; Research Communications, Ltd., 1988).

The research literature strongly supports the conclusion that telecourses are an effective way to deliver instruction to students who do not have convenient access to the conventional alternative. The research also shows that telecourses are superior to correspondence courses (Adams, 1987; Platten and Barker, 1987).

The major issue with telecourses is not whether they are as effective as face-to-face courses per se, but whether telecourses are skillfully planned and delivered, with the same attention to pedagogical and organizational issues that is essential in planning and delivering a conventional course.

In general, no researcher concludes that telecourses should replace conventional courses, but all judge telecourses to be an effective way to increase access to higher education as a complement or supplement to conventional classroom instruction (Stover, 1986, p. 272; Barron, D., 1987, pp. 270-271; Cunningham, 1988, p. 212; Raymond, 1988, p. 290; Research Communications, Ltd., 1988, pp. xi, xiii).

Telecourses do, however, have weaknesses. Throughout the research literature concerns are expressed that telecourses do not allow the frequent and spontaneous interaction with faculty and other students that is possible in conventional classrooms. While these concerns are predictable, none are stated so strongly as to suggest telecourses not be used. Rather, concerns are expressed as qualifications to otherwise enthusiastic evaluations of the value of telecourses.

Telecourses trade off the intimacy of face-to-face instructor-student interaction for major improvements in the convenience of access. And telecourses, when well produced, impose a discipline and organizational rigor on instructors that is not required in the looser structure of the conventional classroom. In general, the observed weaknesses of telecourses all seemed to be things that could be or already were being improved upon (e.g., Oaks, 1986; Egan, 1988).

III - Findings: Support for System Approach to Telecommunications

Fifteen Washington community colleges said they saw a need for system-level activities to support telecommunications. The equipment, infrastructure (networks, satellite disks), and training needed to support telecommunication is expensive if purchased individually by colleges. Most of the need for system-level activity related to these expensive items as shown in Table XII.

TABLE XII
Needs Identified for System-level Approach to Telecommunications
(15 of 26 Colleges Expressed Needs)

(Multiple Responses Allowed)	No. of Colleges (N =15)
Increasing infrastructure and equipment	6
Increase or assure system funding	5
Support Telecommunication Center	5
Provide workshop, share expertise	5
Save money by sharing costs	4
Other	2

Note: The college comments are listed in Appendix B.

Conclusions

Summary

This study found a possible reason for the lack of consensus among the community colleges regarding the role and future of telecommunications. Colleges have each experienced telecommunications in different ways and thus no environment for developing a consensus has evolved. Nevertheless, two themes emerged from the diversity:

- Telecommunications has expanded beyond telecourses. Fifteen colleges now offer teleconferences and other telecommunications efforts exist and are planned.
- Telecourses do provide quality education to time- and placebound students throughout the state.

Issues Raised By The Study

1. **Governance:** If colleges are able to implement their telecommunications plans, the next few years will be marked by rapid growth in the telecommunications effort. By the early 1990s telecourses could be offered at 25 of the 27 community colleges. And 21 colleges could be offering teleconferences. The planned expansion for telecommunications raises the following issue:

   Are the current governance and funding mechanisms appropriate for an expanding telecommunications effort?

2. **Telecourses for Retraining:** Telecourses currently provide a quality alternative to students who cannot attend regular courses because of their work schedule. Thus, telecourses may be an ideal delivery mechanism for the retraining of Washington's labor force. Currently, however, most telecourses are academic in nature and are taken predominately by students planning to transfer. The growing demand for retraining raises the following issue:

   Can telecourses be used to continue to meet needs of time- and placebound transfer students and at the same time be expanded to meet the retraining needs of Washington workers?

3. **System Consensus:** The study shows that colleges have had quite different experiences with telecommunications. The different perspectives may have precluded formulation of a system consensus on the issues related to telecommunications. At issue is:

   Is a consensus necessary for future development of telecommunications? If so, can the community college system develop a consensus about the appropriate role for telecommunications given the different experiences and uses of the technology at each campus?

Appendix A

Fall 1989 Video and Telecourse Survey

STATE OF WASHINGTON

STATE BOARD FOR COMMUNITY COLLEGE EDUCATION

FALL 1989 VIDEO AND TELECOURSE SURVEY
STATE BOARD FOR COMMUNITY COLLEGE EDUCATION

College Code: ____

This survey is being conducted across the State of Washington to identify the reasons students are enrolled in courses offered via video or television in Fall 1989 and to describe student experiences with video/telecourses.

Your responses to the survey will provide us with valuable information for course planning in the community college system.

Please provide your social security number in the space below. The State Board for Community College Education needs this number to combine your responses on this questionnaire with information provided by you at registration. The information you provide <u>will not</u> be disclosed individually.

⟹ **Social Security Number:** __ __ __ - __ __ - __ __ __ __

Please circle the **number** of the response or responses which best apply to you for each question.

Q-1. How many video/telecourses, including this one, have you taken? (Circle the **ONE** answer that best applies to you.)

1 THIS IS MY FIRST
2 2 TO 3 VIDEO/TELECOURSES
3 4 to 5 VIDEO/TELECOURSES
4 5 OR MORE VIDEO/TELECOURSES

Q-2. Some students select video/telecourses because they can't regularly attend scheduled classes which meet once or more a week. Others attend because the classes they want were filled. For each of the following reasons for taking a video/telecourse, indicate which apply to you and which do not. (Circle the **BEST** response for each reason listed below.)

1	I prefer learning via video/telecourses	APPLIES	DOES NOT APPLY
2	I prefer regular courses, but all sections I could attend were full	APPLIES	DOES NOT APPLY
3	Video/telecourses minimize travel to and from campus	APPLIES	DOES NOT APPLY
4	Family commitment conflicts with scheduled classes	APPLIES	DOES NOT APPLY
5	Distance to campus is too far for me	APPLIES	DOES NOT APPLY
6	I have no easy means to travel to courses	APPLIES	DOES NOT APPLY
7	Least expensive way to take a class	APPLIES	DOES NOT APPLY
8	Least academically demanding way to take a class (fewer assignments)	APPLIES	DOES NOT APPLY
9	Work schedule prevents attending scheduled classes	APPLIES	DOES NOT APPLY
	Please describe work schedule _____		
	_____		
10	OTHER, Please describe _____		
	_____		

Q-3. Based on your experience, how do you rate the academic rigor (that is, the amount and difficulty of papers, readings, lectures, tests and other assignments) of a video/telecourse compared to other courses you have taken? (Circle the **ONE** answer that best applies to you.)

1 VIDEO/TELECOURSES ARE **EASIER** THAN OTHER COURSES
2 VIDEO/TELECOURSES ARE **HARDER** THAN OTHER COURSES
3 VIDEO/TELECOURSES ARE **ABOUT THE SAME** AS OTHER COURSES

COMMENT:

Q-4. About how many hours do you spend each week viewing **each** video/telecourse in which you are enrolled?

HOURS VIEWING PER WEEK: _____

Q-5. About how many hours do you spend each week reading and studying for each video/telecourse?

HOURS READING AND STUDYING PER WEEK: _____

Q-6. How does the video/telecourse you are taking fit into your educational plans? (Circle the **ONE** answer that best applies to you.)

1 IMPROVES MY BASIC SKILLS (READING, MATH, WRITING)
2 MEETS REQUIREMENTS OF MY MAJOR OR DEGREE
3 IS A COURSE I CAN TRANSFER TO A FOUR-YEAR SCHOOL
4 MEETS MY PERSONAL INTERESTS
6 OTHER, Please describe _____

_____

Q-7. How important is the role of the course instructor for your successful learning in the video/telecourse? (Circle the **ONE** answer that best applies to you.)

1 VERY IMPORTANT
2 IMPORTANT
3 NOT VERY IMPORTANT
4 DON'T KNOW

Q-8. Do you feel you are able to get enough help from the college (faculty and others) with this course you are taking as a video/telecourse? (Circle the **ONE** answer that best applies to you.)

1 NO, I AM NOT ABLE TO GET ENOUGH HELP
2 YES, I GET ALL THE HELP I NEED
3 NOT CERTAIN

COMMENT:

Please indicate the extent to which you agree or disagree with the following statements. (Circle the **ONE** answer that best applies to you.)

Q-9. Video/telecourses are an effective way to learn course content: AGREE DISAGREE NOT SURE

COMMENT:

Q-10. Video/telecourses are less difficult than other courses I have taken: AGREE DISAGREE NOT SURE

COMMENT:

Q-11. I often find my video/telecourse uninteresting: AGREE DISAGREE NOT SURE

COMMENT:

Q-12. I feel frustrated in my video/telecourse, because I do not understand the subject matter being described: AGREE DISAGREE NOT SURE

COMMENT:

Q-13. Video/telecourses are more valuable to me than other courses I have taken: AGREE DISAGREE NOT SURE

COMMENT:

Q-14. I would recommend video/telecourses to my friends: AGREE DISAGREE NOT SURE

COMMENT:

Q-15. Please give us your recommendations or suggestions regarding video/telecourses.

Please help us further by answering the following background questions.

Q-16. What is your current reason for being enrolled in college? (Circle the **ONE** answer that best applies to you.)

1 TO TAKE COURSES RELATED TO CURRENT OR FUTURE WORK
2 TO EXPLORE A CAREER DIRECTION
3 TO SEE IF I WILL DO WELL IN COLLEGE
4 TO TRANSFER TO A FOUR-YEAR COLLEGE AND EARN A DEGREE THERE
5 TO GET A HIGH SCHOOL DIPLOMA OR G.E.D. CERTIFICATE
6 TO IMPROVE ENGLISH, READING OR MATH SKILLS
7 FOR PERSONAL SATISFACTION OR GENERAL STUDIES
8 OTHER, Please describe _____

_____

Q-17. How will your community college course work relate to your current or future job? (Circle the **ONE** answer that best applies to you.)

1 PREPARE FOR A NEW JOB
2 GAIN SKILL FOR A CURRENT JOB
3 PLAN FOR A CAREER CHANGE
4 OTHER, Please describe _____
_____
5 DOES NOT APPLY TO MY CURRENT OR FUTURE JOB

Q-18. How long do you plan to continue course work at this community college? (Circle the **ONE** answer that best applies to your plans.)

1 LONG ENOUGH TO TAKE ONE COURSE
2 LONG ENOUGH TO TAKE 2 TO 5 COURSES
3 AT LEAST TWO QUARTERS
4 ONE YEAR
5 MORE THAN ONE YEAR, LESS THAN TWO
6 AT LEAST TWO YEARS
7 DON'T KNOW

Q-19. What was your highest level of education before this fall? (Circle the **ONE** answer that best applies to your level of education.)

1 LESS THAN HIGH SCHOOL GRADUATE
2 HIGH SCHOOL GRADUATE OR G.E.D. CERTIFICATE
3 SOME POST-HIGH SCHOOL EDUCATION - COLLEGE, VOCATIONAL TRAINING, MILITARY, APPRENTICE, BUT NO DEGREE OR CERTIFICATE
4 CERTIFICATE (LESS THAN TWO YEARS OF POST-HIGH SCHOOL TRAINING)
5 ASSOCIATE DEGREE
6 BACHELOR'S DEGREE
7 MASTER'S OR OTHER POST-BACHELOR'S DEGREE

Q-20. What is your current status while taking this course? (Circle the **ONE** answer that best applies to your status.)

1 FULL-TIME HOMEMAKER
2 STUDENT WORKER
3 FULL-TIME EMPLOYED (32 HOURS A WEEK OR MORE)
4 FULLY SELF-EMPLOYED (YEAR ROUND)
5 PART-TIME EMPLOYED (LESS THAN 32 HOURS A WEEK)
6 FULL-TIME MILITARY
7 NOT EMPLOYED, BUT CURRENTLY SEEKING EMPLOYMENT
8 NOT EMPLOYED AND NOT CURRENTLY SEEKING EMPLOYMENT
9 RETIRED

Q-21. What is your family status? (Circle the **ONE** answer that best applies to your status.)

1 LIVE WITH PARENTS OR GUARDIAN
2 LIVE ON OWN OR WITH ROOMMATES
3 SINGLE PARENT WITH CHILDREN OR OTHER DEPENDENTS IN MY CARE
4 COUPLE WITH CHILDREN OR OTHER DEPENDENTS IN MY CARE
5 COUPLE WITHOUT DEPENDENT CHILDREN
6 OTHER, please describe _____
_____

Q-22. What is your current age?

AGE: _____

Q-23. What is your sex?

1 MALE
2 FEMALE

THANK YOU!

Thank you for your help by completing this survey. Please return this survey in the enclosed stamped, self-addressed envelope to:

State of Washington
State Board for Community College Education
319 7th Avenue, FF-11
Olympia, Wa 98504-3111

Telecourse Survey Responses

College	No. in Courses	Invalid Address	Usable Responses	Response Rate
Grays Harbor	61	—	39	63.9%
Skagit Valley	142	1	84	59.6%
Seattle Central	85	—	63	74.1%
Bellevue	223	—	98	43.9%
Centralia	19	—	17	89.5%
Lower Columbia	38	—	17	44.7%
Spokane Falls	432	—	79	18.3%
Columbia Basin	101	—	46	45.5%
Walla Walla	12	—	2	16.7%
Edmonds	39	—	24	61.5%
South Puget Sound	33	—	11	33.3%
TOTALS	1,185	1	480	40.5%

Women were more likely than men to respond to the survey. The respondents were 74 percent female compared to enrollments of 64 percent female.

Students aged 26 to 35 were more likely to respond to the survey than older students.

	Respondents	Telecourse Students
Under 26	38%	36%
26-35	32%	27%
36+	30%	37%

Appendix B

Video/Telecourses Offering Survey (Deans of Instruction)

RETURN BY NOVEMBER 27, 1989

VIDEO/TELECOURSE OFFERING SURVEY
SURVEY OF COMMUNITY COLLEGES OFFERING VIDEO/TELECOURSES

NOVEMBER 1989

College: _____

This survey is part of a larger study of current and potential activities in Washington community colleges.

The goal of this survey is to describe the types of video/telecourse offerings currently available in our system. The study asks for both factual information on your offerings and your estimates of common behavior in video/telecourses.

Please fill in the blank or circle the number of the responses which best apply to your institution.

Q-1. How many different video/telecourse classes (different subjects) does your college typically offer in a year?

1 1 OR 2 CLASSES
2 3 TO 5 CLASSES
3 6 OR MORE DIFFERENT CLASSES

Q-2. Would you regard any quarter during the year as "typical" in terms of telecourses - that is, a quarter in which the enrollments could be studied in detail and be relatively representative of a full year (just as the State Board uses Fall demographics to represent the typical quarter for all courses)?

1 SUMMER QUARTER
2 FALL QUARTER
3 WINTER QUARTER
4 SPRING QUARTER
5 NO TYPICAL QUARTER AT OUR CAMPUS

Q-3. How do you make the courses available to students? (Circle all that apply.)

1 BROADCAST TELEVISION
2 CABLE TELEVISION
3 VIDEO TAPE CASSETTE

Q-4. What is the single most common method students use to watch the video/telecourse lessons? (Select only one.)

1 BROADCAST TELEVISION
2 CABLE TELEVISION
3 VIDEOTAPE CASSETTE
4 TWO OR MORE OF THE ABOVE. (Please indicate the number from the above list of methods _____.)

Q-5. Where do you think most students watch the video/telecourse lessons? (Circle the most common location.)

1 AT HOME
2 IN A CAMPUS FACILITY
3 IN A PUBLIC LIBRARY
4 OTHER, Please describe _____

Q-6. Which of the following reasons for offering telecourses apply to your college offerings? (Circle one for each reason.)

	(1) APPLIES	(2) DOES NOT APPLY
1) Reach students who cannot attend regular classes because of the distance to campus		
Comments:		
2) Reach students who cannot attend regular classes because of work or family time constraints		
Comments:		
3) Offer high quality instructional courses		
Comments:		
4) Offer courses in a lower cost manner than regular instruction		
Comments:		

		(1) APPLIES	(2) DOES NOT APPLY
5)	Offer courses despite lack of faculty with expertise in area		
	Comments:		
6)	Offer individualized learning option		
	Comments:		
7)	One more way to serve the demand given limited state funding		
	Comments:		
8)	Offers greater flexibility for students planning a full course of study		
	Comments:		

9) Other, please describe _____

_____

_____

Q-7. Is the average teacher time for a video/telecourse more expensive, less expensive or similar in cost to teacher time in a regular class with the same credit load in the same discipline at your college? (Select ONLY one.)

1 VIDEO/TELECOURSE TEACHER COSTS MORE
2 VIDEO/TELECOURSE TEACHER COSTS LESS
3 VIDEO/TELECOURSE TEACHER COSTS ABOUT THE SAME
4 VARIES BY COURSE. Please explain _____

_____

Q-8. What methods exist at your campus to allow for student-teacher interaction for the video/telecourses? (Circle all that apply.)

1 INITIAL CLASS MEETING WITH TEACHER
2 STUDY SESSIONS WITH TEACHER
3 PHONE HOURS AVAILABLE FOR TEACHER
4 MAIL CONTACT
5 TEST SESSIONS WITH TEACHER PRESENT
6 OTHER, Please describe _____

Q-9. On average, how many contacts would you estimate a typical video/telecourse student has with the teacher? (Contacts may be by mail, phone, computer or face-to-face as long as the contact is personal, not simply a mass mailing.)

1 NO CONTACT
2 ONCE A QUARTER
3 TWO OR THREE TIMES A QUARTER
4 FOUR TO EIGHT TIMES A QUARTER
5 ABOUT ONCE A WEEK
6 MORE THAN ONCE A WEEK
7 OTHER. Please describe _____

_____

Q-10. On average, how many times each quarter in video/telecourses is the progress of students evaluated and students provided specific feedback on their learning (i.e., tested, papers graded, visits with teachers)?

1 NO FEEDBACK GIVEN
2 ONCE A QUARTER
3 TWO OR THREE TIMES A QUARTER
4 FOUR TO EIGHT TIMES A QUARTER
5 ABOUT ONCE A WEEK
6 MORE THAN ONCE A WEEK
7 OTHER. Please describe _____

_____

Q-11. Does your college plan to expand, reduce or keep telecourse offerings the same over the next three years?

1 EXPAND OFFERINGS
2 REDUCE OFFERINGS
3 KEEP OFFERINGS THE SAME
4 PLANS ARE UNCERTAIN AT THIS TIME

Q-12. Does your college currently use any national video-teleconferencing networks for faculty/staff in-service, business training, or other programs? (Select all that apply.)

1 YES, FOR FACULTY/STAFF DEVELOPMENT PROGRAMS
2 YES, FOR BUSINESS TRAINING
3 YES, FOR OTHER PURPOSES. Please describe _____

_____

4 NO

Q-13. What services of the Telecommunications Center for the Washington Community Colleges does your college use? (Select all that apply.)

1 RECORDING SATELLITE COURSE MATERIAL
2 RECORDING SATELLITE TELECONFERENCES
3 TAPE DUBBING
4 PROVIDING PREVIEW PACKETS ON COURSES
5 OTHER SUPPORT FOR TELECOURSES (SUCH AS SAMPLE COURSE PACKETS, FACULTY MANUALS)
6 CONSULTING ABOUT TELECOMMUNICATIONS
7 ACCESS TO VIDEO TELECONFERENCES
8 OTHER. Please describe _____
_____
9 NONE

Q-14. Does your college have a plan for future use of telecommunications beyond your current activities?

1 NO
2 YES, TELECONFERENCES SUCH AS NATIONAL WORKSHOPS ARE PLANNED
3 YES, SHORT COURSES
4 YES, OTHER USES ARE PLANNED, Please describe _____
_____

Q-15. Are there any system-level activities which you think could help make the use of telecommunications easier or more effective at your campus? Please describe.

Thank you for your assistance with this study. Results will be available in late January, 1990. Please return this survey by November 27, 1989 to:

Loretta Seppanen
State Board for Community College Education
319 - 7th Avenue, FF-11
Olympia, WA 98504-3111

RETURN BY NOVEMBER 27, 1989

VIDEO/TELECOURSE OFFERING SURVEY
SURVEY OF COMMUNITY COLLEGES NOT OFFERING VIDEO/TELECOURSES

NOVEMBER 1989

College: _____

This survey is part of a larger study of current and potential activities in Washington community colleges.

The goal of this survey is to describe the reasons some community colleges do not currently offer video/telecourses. The study asks for both factual information and your opinion about video/telecourses.

Please fill in the blank or circle the number of the responses which best apply to your institution.

Q-1. Which of the following are reasons your college does not offer video/telecourses? (Circle one response for each reason.)

1)	Already offered by neighboring colleges	(1) APPLIES	(2) DOES NOT APPLY
2)	Too costly to offer	(1) APPLIES	(2) DOES NOT APPLY
3)	Concern for quality of instruction using telecourses	(1) APPLIES	(2) DOES NOT APPLY
4)	Tried telecourses, but demand was low	(1) APPLIES	(2) DOES NOT APPLY
5)	No means of reaching the population we would want to serve	(1) APPLIES	(2) DOES NOT APPLY
6)	Lack of faculty interest	(1) APPLIES	(2) DOES NOT APPLY

7) Other, please describe _____

_____

Q-2. Has your college ever offered video/telecourses? If you have offered, how were the courses made available to students? (Circle all that apply.)

1 NO, NEVER OFFERED
2 BROADCAST TELEVISION
3 CABLE TELEVISION
4 SATELLITE RECEIVING DISH
5 VIDEO TAPE CASSETTE

Q-3. Does your college plan to offer video/telecourses at any time in the next three years?

1 YES, DEFINITELY
2 YES, PROBABLY
3 NO
4 PLANS ARE UNCERTAIN AT THIS TIME

Q-4. Does your college currently use any national video/teleconferencing networks for faculty/staff in-service, business training, or other programs? (Select all that apply.)

1 YES, FOR FACULTY/STAFF DEVELOPMENT PROGRAMS
2 YES, FOR BUSINESS TRAINING
3 YES, FOR OTHER PURPOSES. Please describe _____
_____
4 NO

Q-5. What services of the Telecommunications Center for the Washington Community Colleges does your college use?

1 RECORDING SATELLITE COURSE MATERIAL
2 RECORDING SATELLITE TELECONFERENCES
3 TAPE DUBBING
4 PROVIDING PREVIEW PACKETS ON COURSES
5 OTHER SUPPORT FOR TELECOURSES (SUCH AS SAMPLE COURSE PACKETS, FACULTY MANUALS)
6 CONSULTING ABOUT TELECOMMUNICATIONS
7 ACCESS TO VIDEO TELECONFERENCES
8 OTHER. Please describe _____
_____
9 NONE

Q-6. Does your college have a plan for the future use of telecommunications beyond your current activities and telecourses?

1 NO
2 YES, TELECONFERENCES SUCH AS NATIONAL WORKSHOPS ARE PLANNED
3 YES, SHORT COURSES
4 YES, OTHER USES ARE PLANNED. Please describe _____
_____

Q-7. Are there any system-level activities which you think could make use of telecommunications easier or more effective at your campus? Please describe.

Thank you for your assistance with this study. Results will be available in late January, 1990. Please return this survey by November 27, 1989 to:

Loretta Seppanen
State Board for Community College Education
319 - 7th Avenue, FF-11
Olympia, WA 98504-3111

Comments From Colleges Recommending Additional System-level Activities To Support Telecommunications

Colleges that are currently offering telecourses listed the following system-level activities to make use of telecommunications easier and more effective:

❖❖❖

Communication between us and the Telecommunications Center at Bellevue CC could be improved. It is very difficult to get information regarding a teleconference on the first call. Repeated calls are necessary to get necessary coordinates. Staff is very cooperative, however.

❖❖❖

1. Getting advantage of cheaper rates for courses and telecourses.
2. Sharing of expertise—technical and curricular.
3. Provide assistance in training users.

❖❖❖

Earmarked funds. Continued support for Telecommunications Center. Workshops on telecommunications. Start-up cost for telecourse.

❖❖❖

Funding from a system level. Planning from a system level.

❖❖❖

Pay for use on a statewide basis. Provide earlier information so that we can plan activities with more lead time.

❖❖❖

Telecommunications Center needs additional funding to properly staff during summer. They also need to expand/update equipment so they can make multiple copies at a high speed rate, rather than "real time".

❖❖❖

Continued support of the Telecommunications Center essential. A community college uplink would be very helpful.

System workshops on telecommunications—what its implications could be. Get beyond the telecourse attitude. This attitude makes it difficult to do other things with telecommunications technology.

❖❖❖

The costs to buy into telecourses are high. Some state or regional buy-in would be helpful. The costs per student really don't encourage you to solicit high enrollments.

❖❖❖

Shared downlink for teleconferencing.

❖❖❖

Colleges that are currently not offering telecourses listed the following system-level activities to make use of telecommunications easier and more effective:

❖❖❖

1. Staff development—faculty workshops and presentations of materials and student results—(completion and performance) by experienced faculty. Although such efforts have been considerable individualized work—faculty member to faculty member—to reignite an interest in telecourses.

2. The support and assistance the Center has given the college has been excellent!

❖❖❖

1. Faculty development opportunities.
2. Funding for equipment.

❖❖❖

Support of Telecommunications Center at Bellevue. Creation of an advisory group to the telecommunications center. Support for Northwest Distance Learning Association's proposal for a Distance Education/Instructional Telecommunications Institute. Ann Suter, CABLEARN or Parker Linder, North Seattle CC. Continued push for legislative funding for CC/K-12 telecommunications. Plan. Exploration of cooperative ventures with Oregon Community College Telecommunications Consortium (OCCTC), and Canada's Knowledge Network. Support for

positions like Media Specialists on college campuses (we're a dying breed!).

❖❖❖

Microwave linkages to WSU, etc. Any and all efforts to keep prices down to a reasonable level. Any evaluations would be helpful; i.e. how do we know if program X is any good?

❖❖❖

I know if I dig far enough, I can find answers re: instructor pay methods, syllabi, credit-worthiness issues, course equivalencies, etc. I also have access to a network of people willing to answer specific questions. Possibly schools in Puget Sound region need to get together to discuss consistency in credit-worthiness, cable TV access and reach issues. When public can choose among schools, why take course at Highline Community College for 3 credits when offered for 5 at Bellevue Community College? Also, perhaps system needs a handbook or a database telling not just who offers what but how telecourses are managed on various campuses, and information on instructor pay, course equivalency (re: the University of Washington for example), grading method, level of classroom contact required. Real issue at our college is, considering uncertain demand and high level of disinterest in telecourses by faculty, how much effort shall administration give to making telecourses happen? If not going to do, how do we react to "skim?"

❖❖❖

Appendix C

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